Uranium Enrichment Decontamination and Decommissioning Fund

Proposed Appropriation Language

For necessary expenses in carrying out uranium enrichment facility decontamination and decommissioning, remedial actions and other activities of title II of the Atomic Energy Act of 1954 and title X, subtitle A of the Energy Policy Act of 1992, [$250,198,000] *$303,038,000*, to be derived from the Fund, to remain available until expended: *Provided*, That $30,000,000 of amounts derived from the Fund for such expenses shall be available in accordance with title X, subtitle A, of the Energy Policy Act of 1992. *(Energy and Water Development Appropriations Act, 2000.)*

Explanation of Change

None

Uranium Enrichment Decontamination and Decommissioning Fund

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund was established by the Energy Policy Act of 1992 to carry out environmental management responsibilities at the nation's three gaseous diffusion plants. The plants are located in the East Tennessee Technology Park in Oak Ridge, Tennessee; at the Portsmouth site in Ohio; and at the Paducah site in Kentucky. The Energy Policy Act also directs that the Fund be used to reimburse licensees operating uranium or thorium processing sites for the costs of environmental cleanup at those sites, subject to a site specific reimbursement limit.

The Uranium Enrichment Decontamination and Decommissioning Fund is an integral and necessary component of legislation to privatize uranium enrichment activities in the United States. The Fund addresses the cleanup liabilities at the three gaseous diffusion plants that are attributable to historical DOE operations for weapons and commercial fuel. The future operations of the enrichment facilities will be managed by the commercial United States Enrichment Corporation. Ultimate cleanup of the facilities that are leased from the Department by the United States Enrichment Corporation will commence when operations are completed and the leases are terminated. The Uranium Enrichment Decontamination and Decommissioning Fund includes contributions from annual budgeted appropriations as well as contributions from commercial utilities based upon historical enrichment services, measured in "separative work units."

Program Goal

The goal of the Uranium Enrichment Decontamination and Decommissioning Fund is to cleanup the surplus enrichment plants as soon as possible and reimburse licensees for their remediation activities at uranium and thorium sites. The enrichment plants include valuable facilities and equipment, and the cleanup costs will be offset to the extent that the Department is able to recover the value from these surplus assets.

Program Objectives

The Department plans to "re-industrialize" the surplus sites and infrastructure which will reduce the Department's cleanup cost and will transfer the surplus Federal facilities to private sector firms for productive re-use. In this way, the local socio-economic impacts of shutting down these facilities will be offset by increased commercial job creation.

Performance Measures

The Environmental Management program prepares a performance-based budget that demonstrates the program and project results expected from the resources requested. These performance measures can be found in the site details that follow this overview section.

Significant Accomplishments and Program Shifts

The FY 2001 request reflects the project-oriented structure that EM has developed as a key component to accelerate cleanup and reduce costs. All EM activities have been organized into projects which have a defined scope, schedule, cost, and end state. EM sites are working to sequence projects and track progress, thereby reducing life-cycle costs and schedules. Specific accomplishments and program shifts may be found in the site details that follow this overview.

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Uranium Enrichment Decontamination and Decommissioning Fund	190,153	220,198	-951	219,247	273,038
Uranium/Thorium Reimbursement	30,000	30,000	0	30,000	30,000
Proposed Supplement	0	0	16,000	16,000	0
Subtotal, UE Decontamination and Decommissioning Fund	220,153	250,198	15,049	265,247	303,038
Supplemental Pending	0	0	-16,000	-16,000	0
Total, UE Decontamination and Decommissioning Fund	220,153	250,198	-951 [a]	249,247	303,038

Public Law Authorizations:

Public Law 106-60, “The Energy and Water Development Appropriations Act, 2000"

Public Law 95-91, “Department of Energy Organization Act (1977)”

Public Law 103-62, “Government Performance and Results Act of 1993"

Title X, Subtitle A, “Energy Policy Act of 1992"

[a] Reflects Congressional Rescission.

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Oak Ridge Operations Office	190,153	219,247	273,038	53,791	24.5%
Multi-Site	30,000	30,000	30,000	0	0.0%
Total, UE Decontamination and Decommissioning Fund	220,153	249,247	303,038	53,791	21.6%

Oak Ridge

Mission Supporting Goals and Objectives

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund was established by the Energy Policy Act of 1992 and is carried out by the Oak Ridge Operations Office to cleanup the nation's three gaseous diffusion plants. The three gaseous diffusion plants located in Oak Ridge, Tennessee; Portsmouth, Ohio; and Paducah, Kentucky. The gaseous diffusion plant in Oak Ridge was shut down in 1985. The plants in Portsmouth and Paducah have been operated by the United States Enrichment Corporation since 1993. The Uranium Enrichment Decontamination and Decommissioning Fund supports decontamination and decommissioning, remedial actions, waste management, and surveillance and maintenance of the three gaseous diffusion plants. The Uranium Enrichment Decontamination and Decommissioning Fund is currently the sole funding source for cleanup at Portsmouth and Paducah, and is the dominant source of funds for the Oak Ridge Gaseous Diffusion Plant. The Uranium Enrichment Decontamination and Decommissioning Fund also reimburses licensees for cleanup of uranium and thorium processing sites that previously sold these materials to the Government.

Program Goal

The Oak Ridge Operations Office goals are: to continue ongoing remedial actions to prevent the spread of existing contamination, and continue waste management activities to address legacy wastes at the sites; complete ongoing remedial actions by FY 2006 and waste management activities by FY 2013 at Portsmouth; and complete ongoing remedial action and waste management activities at Paducah by FY 2012. A tri-party team of State and Federal regulators and DOE managers are currently reviewing the technical and management approaches at Paducah to allow for possible completion in 2010. Comprehensive decontamination and decommissioning and cleanup of these sites cannot be completed until the privatized United States Enrichment Corporation terminates the leases on the two plants. This work scope is not contained in the Environmental Management Project Life Cycle Baseline. Should shutdown of one of the plants occur prior to completing current cleanup scope, significant impacts would occur unless the Uranium Enrichment Decontamination and Decommissioning Fund is increased accordingly to accommodate the new scope. The Department's cleanup goal for the gaseous diffusion plants will allow reuse of the sites for industrial purposes. To fulfill this goal, the Department must remove hazardous materials, treat and dispose of legacy waste, remediate sites to meet industrial reuse standards, decontaminate facilities to allow reuse, and demolish unusable facilities. Where possible, new technologies will be employed to address waste treatment, groundwater cleanup, and facility decontamination achieving considerable cost savings. The East Tennessee Technology Park is implementing all of these aspects in the ongoing cleanup program. The Department is actively transitioning the site from a

Federally-managed DOE installation to a privately-managed industrial park. The name of the site was changed from the Oak Ridge Gaseous Diffusion Plant to the East Tennessee Technology Park to reflect this ongoing transition. The leasing program will be fully implemented by 2006 and the site cleanup will be complete in 2011. The timely cleanup of the Oak Ridge site will free up funds to address cleanup at other sites following the cessation of operations. The cleanup program is being carried out under the requirements of Federal and state compliance agreements that reflect community stakeholder involvement.

Program Objectives

The primary objective at Oak Ridge sites is to conduct remedial actions to limit the spread of contamination, waste management to remove legacy waste, and decommissioning to disposition the process and ancillary buildings. New technologies will be deployed, where possible, to address trichloroethylene contaminated soil and groundwater; long-term stabilization of buried waste (especially uranium waste); for treatment of mixed waste; and for facility decontamination. Another objective is to solve cleanup challenges related to the significant amount of legacy wastes, the size and physical condition of the processing facilities and the areal extent of soil and groundwater contamination. For example, the Paducah groundwater plumes contain one of the largest volumes of off-site contamination in the Department of Energy complex.

The Oak Ridge Gaseous Diffusion Plant is shutdown, and the focus is on cleanup followed by re-use of viable facilities by private sector firms. Decommissioning of the three process buildings at the site will be completed to allow reuse by FY 2004.

Funding is requested to continue remedial actions that have prevented off-site migration of contaminants through groundwater at Portsmouth and reduce further migration of off-site groundwater plumes at Paducah. The Department plans to complete ongoing remediation at Portsmouth by FY 2006 and Paducah by FY 2012 (possible acceleration to 2010 with different technical and management approaches).

Performance Measures

Performance measures are provided at an aggregate level after the Funding by Site table as well as at a project level in the Detailed Program Justification.

The Executive Budget Summary and the Metrics Summary provide a consistent set of high level performance measures. The more detailed project-level justification provides a description of significant activities for each project, including detailed project performance measures and key project milestones, as applicable.

Significant Accomplishments and Program Shifts

East Tennessee Technology Park

- Constructed and began operations of the decommissioning workshop, continued equipment removal, initiated decontamination processing, and authorized releases of clean metals from the K-33 Process Building under the three building decommissioning contract to reduce outyear mortgage costs for surveillance and maintenance and provide beneficial reuse of buildings (FY 1999).
- Completed cleanup of Mitchell Branch plume to mitigate contaminant migration to groundwater (FY 1999).
- Complete Group 1 (5 buildings) auxiliary facilities decommissioning/demolition project and continue deactivation of K-25 Process Building (FY 2000).
- Complete disposal of 2000 cubic meters of unstabilized pond waste in accordance with site treatment plan/Federal Facilities Compliance Act provisions (FY 1999/FY 2000/2001).
- Complete remedial actions at the K-1070 C/D G Pit and award contract for cleanup of the K-1070 A, Contaminated Burial Ground, addressing the source of contamination and reducing environmental and health risks at East Tennessee Technology Park (FY 2000).
- Complete cleanup of K-1070A contaminated burial ground, processing contamination releases from 26 trenches and 62 pits (FY 2001).
- Continue building K-1420 decommissioning to reduce outyear mortgage cost for surveillance and maintenance (FY 1999). Complete decommissioning of the K-1420 building and turn over for industrial reuse (FY 2001).
- Complete K-33 decommissioning and turn over for industrial reuse (FY2001).

Paducah Gaseous Diffusion Plant

- Complete site evaluation of four electrical switch yards (FY 2000).
- Completed Record of Decision, remedial design and initiate construction startup for LASAGNA^{TM} electro-osmosis technology in-situ remediation of the Former Cylinder Drop Test Area (FY 1999) to prevent the migration of contaminants from the source area to groundwater.
- Completed remedial investigation at four release sites (FY 1999) to meet the Federal Facility Agreement compliance milestones.
- Completed sale of 28 fluorine cells and equipment to Air Products and Chemicals for beneficial reuse (FY 1999).
- Complete mixed waste treatability studies for treatment/disposal of mixed low-level and low-level radioactive waste (FY 1999) to reduce risks of long-term storage and comply with site treatment plan

milestones.

- Shipped offsite for disposal 63 m^3 of Resource Conservation and Recovery Act ash receivers, 333 m^3 of low-level waste ash receivers, and approximately 1,000 polychlorinated biphenyl capacitors; completed recycling of current inventory of lead acid batteries; and completed treatment and disposal of 6.4 m^3 of pyrophoric uranium waste to reduce legacy waste inventory and waste storage footprint and meet Federal Facility Compliance Act Site Treatment Plan enforceable milestones (FY 1999).
- Initiate surface water operable unit remedial investigation and surface soils operable unit remedial investigation/feasibility study (FY 2000).
- Complete engineering evaluation/cost analysis for removal and disposal of 51,000 tons of scrap metal (FY 2000), and complete engineering evaluation/cost analysis for removal and disposal of 7,500 tons of crushed drums (Drum Mountain) to support accelerated action (FY 2000).
- Complete packaging 7,500 tons of crushed drums from Drum Mountain (FY 2000); complete disposal of these drums in the 1st quarter FY 2001.
- Complete construction of an in situ reactive gate innovative technology for the southwest groundwater plume (FY 2000).
- Complete field and planning activities leading to a FY 2001 Record of Decision at Paducah for implementing the final remedial action of sources contributing to the existing Northeast and Northwest contaminated groundwater plumes; complete remedial action startup of LASAGNA™ electro-osmosis technology at the former Cylinder Drop Test Area; and reduce legacy waste inventory. Kentucky regulators are requesting total removal of a uranium burial area where DOE had proposed a presumptive remedy of capping and monitoring (FY 2000).
- Accelerate characterization and disposal of remaining 9,000 drums of low-level waste (FY 2001).

Portsmouth Gaseous Diffusion Plant

- Completed corrective action on Landfill closure independent certification (X-735); and completed corrective action on Phytoremediation Project (X-740) (FY 1999).
- Regulator approval of Corrective Measures Study Reports for the Quadrant I (corrective actions on the Contaminated Materials Disposal Facility (X-749)Old Training Facility (X-120)), Quadrant IV, and Quadrant II (corrective actions on the Holding Pond area groundwater plumes (X-701B)) (FY 1999).
- Complete risk reduction actions for East Drainage Ditch and Big Run Creek (FY 1999). Complete risk reduction actions at the Chemical Cleaning Facility (X-700) chemical and petroleum storage containment tanks and North Drainage Ditch, and Northeast Drainage Ditch to prevent contaminant migration off-site via surface water pathways (FY 2000).
- Complete installation of soil cap at the landfill southern portion (X-734) (FY 1999) and multi-media cap on northern cap portion (FY 2000).
- Complete transition from investigation and interim corrective measures of contaminated soil source areas

which will lead to final corrective measures implementation of groundwater contamination (primarily trichloroethylene) in FY 2002 and reduce legacy waste inventory (FY 2000).

Initiate design/build of corrective action on the groundwater plume (X-701B) and corrective action on the soil unit final corrective measures (X-720) (Quadrant I) (FY 2001).

Accelerate disposal of approximately 300 containers of heavy metal sludge (FY 2001).

Funding Schedule

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
OR-193 / Non-recurring Contractor Transition	13,704	6,583	3,805
OR-423 / East Tennessee Technology Park Remedial Action	4,837	18,075	22,193
OR-433 / East Tennessee Technology Park Decontamination and Decommissioning	21,025	5,394	10,732
OR-443 / East Tennessee Technology Park Surveillance & Maintenance	28,552	13,103	17,150
OR-493 / East Tennessee Technology Park Oak Ridge Operations Prime Contracts	50,882	69,402	61,270
OR-523 / Paducah Remedial Action	15,942	23,078	36,726
OR-543 / Paducah Surveillance and Maintenance	6,011	13,227	10,269
OR-553 / Paducah Waste Management	13,912	17,898	31,005
OR-623 / Portsmouth Remedial Action	10,413	24,448	53,825
OR-643 / Portsmouth Surveillance and Maintenance	3,601	7,182	9,361
OR-653 / Portsmouth Waste Management	15,439	14,440	13,014
OR-893 / Directed Support	5,835	6,417	3,688
Total, Oak Ridge	190,153	219,247	273,038

Funding By Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
East Tennessee Technology Park	105,296	105,974	111,345	5,371	5.1%
Oak Ridge Operations Office	5,835	6,417	3,688	-2,729	-42.5%
Oak Ridge Reservation	13,704	6,583	3,805	-2,778	-42.2%
Paducah	35,865	54,203	78,000	23,797	43.9%
Portsmouth	29,453	46,070	76,200	30,130	65.4%
Total, Oak Ridge	190,153	219,247	273,038	53,791	24.5%

Metrics Summary

	FY 1999	FY 2000	FY 2001
Remedial Action/Release Site			
Assessments	4	4	31
Cleanups	3	2	13
Facility Decommissioning			
Assessments	2	3	0
Cleanups	6	0	0
Mixed Low-Level Waste (m^3)			
Disposal	5,940	4,815	2,670
Low-Level Waste (m^3)			
Commercial Disposal	1,249	0	1,210

Site Description

Oak Ridge Operations Office

The Oak Ridge Operations Office manages, coordinates, tracks, and assists in the implementation of the Environmental Management program among the various sites. Oak Ridge leads the National Program for Metal Recycle, as well as crosscutting integration efforts related to the Oak Ridge sites. In addition, the Oak Ridge Operations Office manages oversight agreements with the States of Tennessee, Ohio, and Kentucky and provides funding for all off-site projects.

Oak Ridge Reservation

The Oak Ridge Reservation encompasses about 37,000 acres and is comprised of three facilities; the Y-12 Plant, which was a uranium processing facility and now dismantles nuclear weapons components and serves as the nation's storehouse for special nuclear materials; the East Tennessee Technology Park, which was a uranium enrichment facility and is now being transitioned through reindustrialization; and the Oak Ridge National Laboratory, which conducts applied and basic research in energy technologies and in the physical and life sciences. Only East Tennessee Technology Park is funded under the Uranium Enrichment Decontamination and Decommissioning Fund.

East Tennessee Technology Park (formerly K-25)

The East Tennessee Technology Park is located on a 1,500 acre tract of land adjacent to the Clinch River, approximately 10 miles west of Oak Ridge, Tennessee. It was built as part of the World War II Manhattan Project and used to enrich uranium for national defense purposes. By the mid-1950s, five large uranium enrichment buildings covering 114 acres were in operation: K-25, K-27, K-29, K-31, and K-33. Four electrical switch yards and eight cooling towers served these buildings. Machinery was fabricated, serviced, repaired, and cleaned at on-site facilities. Enrichment of weapons-grade uranium ceased in 1964. The plant continued to produce low enriched uranium for commercial nuclear power purposes until 1985, when the plant was shut down.

Paducah

The Paducah Gaseous Diffusion Plant is located approximately 15 miles west of Paducah, Kentucky, near the Ohio River. Department of Energy property comprises nearly 3,500 acres; 750 acres are inside the site's security fence, and 2,000 acres are leased to the Kentucky Department of Fish and Wildlife. Plant process buildings cover 74 acres. Paducah began operations in 1952 to produce low-assay enriched uranium for use as commercial nuclear reactor fuel. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation in accordance with the Energy Policy Act of 1992.

Portsmouth

The Portsmouth Gaseous Diffusion Plant is located approximately 22 miles north of Portsmouth, Ohio. Construction of the 3,714 acre site began in 1952. Plant process buildings cover 93 acres. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy. Since 1991, the plant has produced only low-enriched uranium for commercial power plants. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation in accordance with the Energy Policy Act of 1992.

Detailed Program Justification

(dollars in thousands)

FY 1999	FY 2000	FY 2001

The Oak Ridge Operations Office Environmental Management projects under the Uranium Enrichment Decontamination and Decommissioning Fund are managed by a Management and Integrating contractor through incentivized contracts, with fixed-price subcontracts, to assure the most cost efficient service to the Government.

The scope planned for FY 2001 has been reviewed and is appropriate to meet the goals of the site as outlined in the *Accelerating Cleanup: Paths to Closure* document. Project Baselines for activities included in this section of the budget have had, or are planned to have, an independent cost review of the scope, and the funds requested for FY 2001 are appropriate to perform the activities based on a historical level of effort and fixed-price contracts. Regulatory drivers for cleanup are Federal Facility Agreements which integrate Comprehensive Environmental Response Compensation and Liability Act and Resource Conservation and Recovery Act requirements; Consent Orders issued by the state regulators for permitted hazardous waste units; Resource Conservation and Recovery Act Part B hazardous waste management permits; Toxic Substances Control Act regulations for management of polychlorinated biphenyls; and Federal Facility Compliance Agreements for management of legacy mixed waste. The agreements establish enforceable milestones for completing major activities at the sites consistent with site baselines.

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-193 / Non-Recurring Contractor Transition

This project includes activities associated with transition from a management and operating contractor to the management and integration contractor. All non-recurring contractor transition activities except for post-April 1, 1998, post-retirement medical benefits are scheduled to be completed in FY 2000. Key subprojects include Information Technology; Environment, Safety and Health; project controls systems development; medical benefits and long-term disability; and reduction-in-force costs. Following the transition, Bechtel Jacobs Company will be a more cost-effective, streamlined organization with the majority of the work transitioned to subcontractors. These policies and procedures assure subcontractors apply the same high standards for safety and effective progress tracking as Bechtel Jacobs Company. Funding shared with Program Baseline Summary OR-191. The Management and Integration Contract was awarded to Bechtel Jacobs Company in December 1997. The contract period started April 1, 1998. The Contractor Transition period will be complete on March 31, 2000. At that time, all Information Technology, Integrated Safety Management System, and project controls systems implementation will be completed. Post-April 1, 1998, post-retirement medical benefits and long-term disability will continue to be funded in this Program Baseline Summary and the Defense-Post-2006 completion Program Baseline Summary OR-191.

Post April 4, 1998, post-retirement medical benefits and long-term disability will continue to be funded in this Program Baseline Summary and the Defense-Post 2006 Completion account Program Baseline Summary OR-191.

OR-193	13,704	6,583	3,805

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-423 / East Tennessee Technology Park Remedial Action

Complete Comprehensive Environmental Response, Compensation, and Liability Act activities at the East Tennessee Technology Park watershed including: removal of hazardous materials; treatment and disposal of remediation waste; source control/elimination to preclude the additional spread of contamination and remediation of soils, groundwater, and building structures to industrial use standards; and initiate long-term surveillance and maintenance. The technical approach is to evaluate environmental and operational data and to sequence work based on risk and cost-efficient construction logic. Final remedial actions typically are sequenced after decontamination and decommissioning of buildings. Response actions are planned for an unrestricted, industrial use end-state for the East Tennessee Technology Park. The site-wide Record of Decision considers all early actions as part of the long-term remedial action decision process. Fixed price subcontracts will be awarded where appropriate. An integrated safety management approach will be used.

- **#** Complete remedial actions to excavate treat and dispose of classified waste in accordance with the Record of Decisions for the K-1070 A Contaminated Burial Ground. Issue the Remedial Action Reports as required by the Federal Facilities Agreement.
- **#** Issue watershed Record of Decision for the East Tennessee Technology Park site and Remedial Design Work Plan to the regulators in accordance with the enforceable agreement milestones contained in the Federal Facilities Agreement.
- **#** Package, transport and dispose of 2000 cubic meters of unstabilized pond sludge at Envirocare of Utah, in accordance with the Federal Facility Compliance Agreement's Site Treatment Plan

OR-423	4,837	18,075	22,193

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Metrics			
Remedial Action/Release Site			
Assessments	0	1	12
Cleanups	1	0	4
Facility Decommissioning			
Cleanups	2	0	0
Mixed Low-Level Waste			
Commercial Disposal (m^3)	1,113	1,166	2,000
Milestones			
# Complete excavation of the East Tennessee Technology Park K-1070 Burial Ground G-Pit (January 2000).			
# Submit the D1 of the Remedial Action Report for the K-1070 C/D G-Pit and Contaminated Pad (July 2001).			

OR-433 / East Tennessee Technology Park Decontamination and Decommissioning

Complete Comprehensive Environmental Response, Compensation, and Liability Act activities to address environmental hazards at the East Tennessee Technology Park facilities. The scope is decontamination, decommissioning and demolishing facilities per the Comprehensive Environmental Response, Compensation, and Liability Act and Federal Facilities Agreement milestones.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Surveillance and maintenance activities are now included in Project Baseline Summary OR-443. Decontamination and Decommissioning subprojects include K-25/K-27 Buildings deactivation, Poplar Creek Facilities, Powerhouse Facilities, Main Plant Area Facilities, Balance-of-Site Area Facilities, and K-31/K-33 Rabbit Ears Facilities. Facilities are scheduled for decommissioning using a multi-attribute analysis that includes safety, facility condition, re-use potential, and the East Tennessee Technology Park cleanup strategy. Project sequencing is based on risk and optimal construction. Fixed price subcontracts will be awarded. An integrated safety management approach will be used. Work will be performed under a Comprehensive Environmental Response, Compensation, and Liability Act Engineering Evaluation/Cost Analysis Action Memo. It is assumed that waste will be disposed at Environmental Management Waste Management Facilities. The Sitewide Record of Decision will recognize these response actions.			
# Main plant area ancillary facilities Decontamination and Decommissioning: submit draft Remedial Action Work Plan to regulators for review; submit final Remedial Action Work Plan to DOE for approval.			
# Initiate decontamination of Building1401 basement.			
# Submit Engineering Evaluation/cost Analysis to Regulators for Decommissioning of K-25 and K-27 buildings.			
OR-433	21,025	5,394	10,732

Metrics			
Facilities Decommissioning			
Assessment	0	1	0
Cleanups	4	0	0
Key Milestones			
# K-25/K-27 Buildings Decontamination and Decommissioning - Submit the D1 of the Engineering Evaluation/Cost Analysis of the K-25/K-27 Decontamination and Decommissioning (May 2001).			
# K-25/K-27 Building Decontamination and Decommissioning - Submit the Action Memorandum for the K-25/K-27 Building Decontamination and Decommissioning (September 2001).			

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-443 / East Tennessee Technology Park Surveillance and Maintenance

The surveillance and maintenance Project Baseline Summary scope includes all elements of work required to ensure adequate containment and control of shutdown facilities that await decontamination and decommissioning or reuse. This Project Baseline Summary represents scope that is conducted in conjunction with Project Baseline Summary OR-441 under the Defense Post-2006 Completion account, because dual funding sources are utilized to carry out these activities. There are several subprojects and/or work elements that comprise the total scope of this Project Baseline Summary. The FY 2001 scope for this Project Baseline Summary slightly exceeds the identified funding. The full scope will be accomplished through efficiencies in the overall Oak Ridge Decontamination and Decommissioning Fund Program.

Surveillance and maintenance of gaseous diffusion facilities (78 total facilities), remedial action sites (131 total sites listed in the Federal Facility Agreement), and post-cleanup operations and maintenance (five total sites with post-Record of Decision and/or post-Action Memo surveillance and maintenance requirements). The technical approach to accomplishing this work is through a systematic program of building/facility/site inspections (walkthroughs and exterior inspections), routine surveillance, asbestos surveys, and instrument calibration, with routine and/or “as-needed” maintenance. The surveillance and maintenance program maintains facilities in “minimum-safe” conditions until such time decontamination and decommissioning is initiated or a facility is transitioned to a private tenant for reuse. Deficiencies are corrected using a risk-based priority approach. Additionally, the surveillance and maintenance program maintains compliance with the Comprehensive Environmental Response, Compensation, and Liability Act requirements at sites/facilities that have been remediated or await remediation.

(dollars in thousands)

FY 1999	FY 2000	FY 2001

Other elements of this Project Baseline Summary involve a portion of the base activities, services, and/or functions necessary to support site-wide operations. These include security (protective forces, classification, personnel and computer security, etc.), fire protection (fire department, emergency response, etc.), utilities, environmental safety and health programs (permit compliance, medical, etc.), real property management (maintenance of active facilities), custodial services, reindustrialization support, and infrastructure improvement/repair projects. Improvement and repair projects are only conducted if: they have a short-term payback (3-4 years); mitigate safety and health concerns; are absolutely necessary to support site-wide operations; and/or are vital to meeting the site's end-use vision.

The overall strategy for the Project Baseline Summary scope is to complete all work in an efficient and cost-effective manner while incorporating the Integrated Safety Management System requirements. Also, the goal is to reduce the cost of these "mortgage" activities to allow more remedial action and decontamination and decommissioning work to be conducted. As remediation, decontamination and decommissioning progress, or are completed, the need for some of these activities will diminish, or less rigorous levels of these activities will be needed, thus lowering the "mortgage" for the site.

- # Complete annual decontamination and decommissioning surveillance and maintenance report.
- # Implement Remedial Action Surveillance and Maintenance Program in accordance with applicable environmental safety and health, Federal, state, and DOE requirements.
- # Issue annual Integrated Water Quality Plan monitoring report for K-901 Pond and K-1007 Pond.
- # Provide optimum annual level of services to maintain infrastructure facilities for reuse or Decontamination and Decommissioning. Infrastructure support costs have been reduced by innovative contract with OMI Corporation.
- # Effectively support DOE and Community Reuse Organization - East Tennessee Reindustrialization Program efforts.
- # Start K-1225 Roof Replacement.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
# Start and complete K-1004L Heating, Ventilation, and Air Conditioning System Replacement.			
# Start and complete K-1041 Roof Ventilation Hoods Repair.			
# Start/complete K-1034A Sprinkler System Installation.			
# Complete Personnel Protection Area Reconfiguration: Radcon Protection, Security Protection Controls, and Public Emergency Notification projects.			
OR-443	28,552	13,103	17,150

Remedial Action/Release Site			
Assessments	0	1	0

OR-493 / East Tennessee Technology Park - Oak Ridge Operations Prime Contracts

This fixed price project involves the removal of process equipment and the decontamination of the contaminated equipment and building space from three of the five process buildings on the East Tennessee Technology Park site. The decontaminated buildings will be released for reindustrialization leasing upon completion. The surface decontaminated metals will be regulated, released, and recycled. This Program Baseline Summary also includes a prime contract to Decon Recovery Services to decommission the K-1420 building, a former decontamination facility.

# Complete decommissioning and turnover of the K-33 building for industrial reuse.			
# Initiate decommissioning in the K-31 building.			
# Complete construction and begin operation of the BNFL, Inc./Manufacturing Sciences Corporation K-33 supercompactor.			
# Complete decommissioning, verification, and turnover for industrial re-use at building K-1420 (under the Decon Recovery Services contract).			
OR-493	50,882	69,402	61,270

Metrics			
Remedial Action/Release Site			

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
Assessments	0	2	0
Facility Decommissioning			
Assessments	2	2	0
Mixed Low-Level Waste			
Commercial Disposal (m^3)	3,537	3,571	0
Key Milestones			
# Stabilized Pond Waste and Portsmouth Soils Drums removal and shipment from K-31 and K-33 for Disposal (February 2000).			
# K-33 Cascade Unit 7 complete (March 2000).			
# K-33 Cascade Unit 5 - Complete Dismantlement and Removal (July 2000).			
# Manufacturing Sciences Corporation Supercompactor Facility Operational at K-33 (October 2000).			
# Manufacturing Sciences Corporation Kerr Hollow Electro Refining Facility Operational (November 2000).			
# Complete Process Building Turnover - K-33 (July 2001).			

OR-523 / Paducah Remedial Action

Remedial action activities at the Paducah Gaseous Diffusion Plant to address hazardous/solid waste units and reduce the public risk due to extensive groundwater contamination (technicium, trichloroethylene). The cleanup approach is to address potential public risks through source control, plume mitigation, pre-decommissioning, and long-term surveillance and maintenance.

(dollars in thousands)

FY 1999	FY 2000	FY 2001

The remedial action strategy was revised in FY 1999 to incorporate recommendations by the new Management and Integration contractor intended to maximize opportunities to benefit from regional approaches and economies of scale, reduce documentation cost, and provide a better process to evaluate cumulative affects. The revised strategy establishes five operable units based upon contaminant transport pathways: groundwater; surface water; surface soils; burial grounds; and decontamination and decommissioning (not included in current scope). Site priorities and sequencing of projects were reviewed by senior managers from DOE, the Environmental Protection Agency Region IV, and Kentucky to facilitate cleanup acceleration and address high priority environmental, safety, and health concerns. Consolidation of work scope under this new strategy is expected to result in approximately $50,000,000 in life-cycle cost avoidance savings.

- # Complete Remedial Investigation fieldwork for Surface Water Operable Unit, issue Remedial Investigation Report, and initiate the Feasibility Study.
- # Complete remediation using the Lasagna Technology at the former Cylinder Drop Test Area.
- # Initiate early actions for the North/South diversion ditch and groundwater source terms (i.e., pilot deployments/treatability studies).
- # Initiate the Remedial Investigation fieldwork for the Surface Soils Operable Unit.
- # Issue Record of Decision for the Groundwater Operable Unit and initiate the remedial design. A critical path activity for completing site cleanup.
- # Complete disposal of 7,500 tons of crushed drums from Drum Mountain in the first quarter.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
# Continue implementation of fieldwork for removal of remaining 57,500 tons of scrap metal from eight storage yards. Accelerate field work for removal of scrap inventory located on top of burial grounds which require remedial investigation. The regulators and stakeholders are concerned that the scrap piles continue to release radiological contaminants into the environment. This concern has also received national media attention. Remedial investigation of the underlying soil cannot be initiated until the scrap has been removed. This is a critical path activity for surface water and burial ground operable units. Stabilization of shutdown facilities to reduce radiological releases to the environment is also a concern to regulators and stakeholders.			
# Issue the annual update to the Site Management Plan as part of the Federal Facilities Agreement			
# Accelerate stabilization activities in the C-340 metals plant and C-410 feed plant shutdown buildings			
OR-523	15,942	23,078	36,726

Metrics			
Remedial Action/Release Site			
Assessments	2	0	19
Cleanups	1	1	0
Key Milestones			
# Complete construction of an In-Situ Gate for the Paducah Southwest Plume (September 2000).			
# Complete packaging of crushed drums in Paducah Scrap Yard (Drum Mountain) (September 2000).			
# Groundwater Operable Unit - Issued D1 Proposed Plan (November 2000).			
# Scrap Metal - Complete disposal of Drum Mountain (December 2000).			
# Groundwater Operable Unit - Issue D1 Record of Decision to the Environmental Protection Agency/Kentucky Department of Environmental Protection (May 2001).			
# Scrap Metal - Issue D1 Removal Action Workplan for Balance of Scrap (June 2001).			

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-543 / Paducah Surveillance and Maintenance

Surveillance and maintenance at Paducah includes routine and long-term surveillance and maintenance of DOE facilities and release sites, as well as environmental monitoring, groundwater sampling, and pollution prevention activities. Specific requirements for surveillance and maintenance activities for release sites, environmental monitoring, and groundwater sampling are defined by various regulatory agreements and permits, including the Kentucky Hazardous Waste Permit, Kentucky Pollutant Discharge Elimination System Permit, Solid Waste Permit, Federal Facilities Agreement, Toxic Substances Control Act, Federal Facilities Compliance Act, DOE Orders and regulations, as well as Comprehensive Environmental Response, Compensation, and Liability Act Record of Decisions and Operating and Maintenance plans. The current scope does not account for additional remediation, wastes, or surveillance and maintenance activities associated with actual decontamination and decommissioning of the Gaseous Diffusion Plant. When a definitive schedule is developed for Decontamination and Decommissioning of the Gaseous Diffusion Plant, the scope will be revised to account for the additional work.

- Provide water to residents north of the Paducah Gaseous Diffusion Plant affected by off-site contamination.
- Continue pump and treat ~362,000,000 gallons of groundwater primarily contaminated with trichloroethene from North east and North west groundwater plumes.
- Sample 161 residential and monitor wells. Inspect C-340 and C-410 buildings. Inspect and take necessary corrective actions for 212 release sites (both pre- and post-remedial action areas).
- Decontaminate and transfer of fluorine cells for reuse.
- Conduct five-year review for interim actions under the groundwater and surface water operable units.
- Conduct Kentucky Pollutant Discharge Elimination System environmental monitoring and reporting.
- Monitor, inspect, and maintain operating and closed landfills and complete associated regulatory reporting under the Resource Conservation and Recovery Act and Solid Waste Permits.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
# Meet regulatory reporting required by compliance agreements.			
OR-543	6,011	13,227	10,269

Metrics

This project has associated metrics; however, no metrics are reportable in the 3-year budget profile.

OR-553 / Paducah Waste Management

Continue reducing legacy waste inventory through off-site treatment and disposal; continue compliant storage activities and restoration-derived waste management; and provide waste management technical and landlord support.

The waste management strategy is to address high-risk waste first; remove, recycle/disposition 65,000 tons of scrap metal; maximize disposition of legacy waste in on-site solid waste landfill that meets the waste acceptance criteria; and continue to apply pollution prevention principles to ongoing project activities to minimize waste generation. Approximately $35,000,000 is expected in cost avoidance savings over this project life-cycle as a result of this strategy.

- # Incorporate Integrated Safety Management Systems into all waste management activities.
- # Dispose polychlorinated biphenyl transformers to off-site commercial vendor.
- # Dispose off-site of mixed low-level waste.
- # Complete fire protection and Office of Safety and Health Administration electrical upgrades at five waste storage facilities.
- # Dispose on-site waste currently managed as low-level waste that meets the C-746-U Landfill Waste Acceptance Criteria.
- # Complete all requirements of the Toxicity Characteristic Leaching Procedure Federal Facility Compliance Act.
- # Treat and discharge on-site, 5,000 gallons of organic contaminated wastewater.
- # Dispose in on-site landfill, 3,000 tons of DOE and United States Enrichment Corporation industrial waste.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
# Complete all site treatment plan deliverables.			
# Continue all mixed low-level waste treatability studies and treatment to meet site treatment plan requirements.			
# Complete characterization of 3,000 cubic meters of low-level waste for off–site disposal.			
# Complete the design of the low-level waste sorting and packaging facility.			
# Sample and characterize 2.9 cubic meters of liquids and 1.7 cubic meters of solid transuranic waste for treatment.			
# Ship approximately 600 cubic meters of polychlorinated biphenyl/radioactive and Resource Conservation and Recovery Act/radioactive waste to Envirocare of Utah for disposal.			
# Accelerate characterization and disposal of remaining 9,000 drums of low-level waste.			
OR-553	13,912	17,898	31,005

Metrics			
Transuranic Waste			
Storage (m^3)	5	5	5
Mixed Low-Level Waste			
Treatment (m^3)	13	44	25
Storage (m^3)	4,224	3,930	3,983
Commercial Disposal (m^3)	8	6	670
Shipped to DOE Disposal Site (m^3)	21	115	140
Low-level Waste			
Treatment (m^3)	7	0	420
Storage (m^3)	99,802	6,960	6,564
On-Site (m^3)	548	0	300
Commercial Disposal (m^3)	120	0	910
Shipped to DOE Disposal Site (m^3)	0	0	90

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-623 / Portsmouth Remedial Action

Complete transition from investigation and interim corrective measures of hazardous/solid waste units to cleanup of on-site groundwater contamination (primarily trichloroethylene) at the Portsmouth Gaseous Diffusion Plant. Groundwater cleanup will employ new technologies for trichloroethylene removal. Activities include closure of remaining Resource Conservation and Recovery Act hazardous waste units, containment and contaminant removal of on-site groundwater plumes, treatment or disposal of legacy waste, and pre-decommissioning.

- **#** Complete design of final Corrective Measures Implementation for corrective action on 5-unit groundwater plumes (X-749/X-120); and corrective action on the Burial Ground (X-231A/X-231B).
- **#** Accelerate Quadrants I and II corrective measure implementation design and construction for final soil and groundwater contamination sources to ensure completion in FY 2002; a Resource Conservation and Recovery Act consent order enforceable milestone.
- **#** Initiate design/build of corrective action on groundwater plume (X-701B) and soil unit final (X-720) corrective measures (Quadrant I).
- **#** Initiate corrective actions on risk reduction actions (X-701B & C) (Quadrant II).

OR-623	10,413	24,448	53,825

(dollars in thousands)

FY 1999	FY 2000	FY 2001

Metrics			
Remedial Action/Release Site			
Assessments	2	0	0
Cleanups	1	1	9

Key Milestones

- # Award Portsmouth Quadrant I Remediation Subcontract (April 2000).
- # Quadrant II X-701C Risk Reduction Installation - Initiate the X-701C Corrective Measures Implementation (September 2001).
- # Quadrant II 7 Unit Groundwater Corrective Measures Implementation Installation - Initiate the 7 Unit Corrective Measures Implementation (September 2001).

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-643 / Portsmouth Surveillance and Maintenance

During the cold war, the Portsmouth Gaseous Diffusion Plant was constructed to enrich uranium in support of both Government and private programs. The plant is currently operational under a lease agreement with the United States Enrichment Corporation which produces Low Enriched Uranium for commercial applications. During DOE`s operation of the plant, there were releases of radiological and hazardous constituents from the process into the workplace and the environment. This project along with OR-623 will complete the DOE portion of the environmental restoration program, and continue with the Long-Term Surveillance and Maintenance program for the site. Additional environmental restoration will likely be required following cessation of plant operations and decontamination and decommissioning of the plant. This action would result in significant scope increase and funding needs. However, this cleanup is beyond the scope of the current DOE plan. The project has the following objectives for the site:

- # Operate and maintain the ongoing groundwater program at the site in accordance with regulatory requirements. This includes operation of existing groundwater treatment facilities which provide confinement of contamination on-site, and treatment for existing groundwater plumes, and operation of the site-wide groundwater monitoring program which tracks the fate of contamination.
- # Conduct Long-Term Surveillance and Maintenance of the Remedial Action units and Decommissioning and Decontamination facilities in accordance with all regulatory and DOE requirements.

OR-643	3,601	7,182	9,361

Metrics

This project has associated metrics; however, no metrics are reportable in the 3-year budget profile.

(dollars in thousands)

FY 1999	FY 2000	FY 2001

OR-653 / Portsmouth Waste Management

During the Cold War, the Portsmouth Gaseous Diffusion Plant was constructed to enrich uranium in support of both Government and private programs. The plant is currently operational under a lease agreement with the United States Enrichment Corporation which produces Low Enriched Uranium for commercial applications. As a result of environmental releases from past production activities, environmental restoration projects conducted by the Portsmouth Remedial Action project have generated waste streams which will be managed by this project.

These streams must be managed in compliance with Resource Conservation and Recovery Act, Toxic Substances Control Act, and DOE Orders. The Waste Management project has the following objectives for the site: a) perform treatment, maintain waste storage and expedite all waste streams to final disposition in full compliance with all DOE Orders, contractor policies and procedures and, Federal and state regulations and permits; b) reduce the waste management overhead burden in direct proportion to the waste streams shipped off-site for disposition; c) document all past, present, and future waste streams generated by DOE-directed activities that have been stored or are being stored for disposition in the Resource Conservation and Recovery Act permitted storage areas.

- # Continue the storage of legacy hazardous, mixed low-level and low-level waste, and sanitary waste in accordance with all DOE Orders, contractor policies and procedures and, Federal and state regulations and permits.
- # Waste treatment/disposal planned for FY 2001 will consist of wastes identified through characterization to be non-mixed (i.e., Resource Conservation and Recovery Act or Toxic Substance Control Act waste) and must be dispositioned within the fiscal year. Characterization will continue in FY 2001 to meet milestones required by the Ohio Environmental Protection Agency Part B Permit and Site Treatment Plan.
- # Accelerate disposal of approximately 300 containers of heavy metal sludge to ensure compliance with site treatment plan milestones.

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
# Accelerate characterization of approximately 14,000 drums of Toxic Substance Control Act low-level waste solids.			
OR-653	15,439	14,440	13,014

Metrics			
Mixed Low-Level Waste			
Treatment (m^3)	0	2	0
Storage (m^3)	7,048	8,603	8,575
Commercial Disposal (m^3)	1,282	72	0
Shipped to DOE Disposal Site (m^3)	30	40	0
Low-Level Waste			
Storage (m^3)	17,433	14,387	15,825
Commercial Disposal (m^3)	581	0	0
Shipped to DOE Disposal Site (m^3)	0	0	0

OR-893 / Directed Support

This project consists of subprojects that are DOE directly managed. They include Agreements-in-Principle grants to Kentucky and Tennessee, DOE Oak Ridge Operations Office Program Management Support, the National Center of Excellence for Metals Recycle, and funds for the termination of the Management and Operations Contractor. The Department of Energy provides grant support to Tennessee and Kentucky for independent support of environmental programs at the Oak Ridge Reservation and Paducah Gaseous Diffusion Plant. The (Agreements in Principle) grants are to provide for the administrative support necessary to oversee the requirements for the interagency agreements under Comprehensive Environmental Response, Compensation, and Liability Act. The National Center of Excellence for Metal Recycle facilitates the cost effective recycle of clean and decontaminated metals at DOE sites across the country. Funding shared with Program Baseline Summary OR-891. The FY 2001 scope for this Project Baseline Summary slightly exceeds the identified funding. The full scope will be accomplished through efficiencies in the overall Oak Ridge Decontamination and Decommissioning Fund Program.

	(dollars in thousands)		
	FY 1999	FY 2000	FY 2001
# The Agreement-in-Principles include support to conduct independent monitoring and sampling and to provide support in a number of emergency response planning initiatives, including cooperative planning, conducting joint training exercises, and developing public information regarding preparedness activities. The Federal Facility Agreement grants support Tennessee and Kentucky in the review and response to Federal Facility Agreement documents including the Remedial Investigation/Feasibility Study, remedial designs, and decision documents (Records of Decision and Action Memoranda). The National Center of Excellence for Metals Recycle has already participated in six large projects and several smaller actions that resulted in the recycling of 11,000 tons of metal and an estimated saving of $9,900,000. The Lockheed Martin Energy System's contract closeout funding supported the closeout of numerous subcontracts awaiting Defense Contracts Audit Agency audit. The Department of Energy Oak Ridge Operations Office program management support continues.			
# Conduct annually independent monitoring and sampling, both on-site and to provide support in a number of emergency response planning initiatives, including cooperative planning, conducting joint training exercises, and developing public information regarding preparedness activities. The Federal Facility Agreement grants support to the Tennessee and Kentucky in the review and response to Federal Facility Agreement documents, including remedial investigations, feasibility studies, remedial designs, and decision documents (Record of Decisions and Action Memoranda). Continue to facilitate the recycle of metal throughout the DOE complex. Continue closing subcontracts, supporting litigation activities.			
OR-893	5,835	6,417	3,688
Total, Oak Ridge	190,153	219,247	273,038

Explanation of Funding Changes From FY 2000 to FY 2001

	FY 2001 vs. FY 2000 ($000)
OR-193 / Non-Recurring Contractor Transition	
# The net decrease of $-9,436,000 for Program Baseline Summary OR-191 (Defense Post 2006 Completion) and OR-193, which share workscope, is due to completed transition from Management and Operating contractor to a new Management and Integrating contractor in FY 2000	-2,778
OR-423 / East Tennessee Technology Park Remedial Action	
# Increase required to excavate, treat, and dispose of contaminated materials from the cleanup at K-1070 A contaminated burial ground	4,118
OR-433 / East Tennessee Technology Park Decontamination and Decommissioning	
# The increase is attributable to the initiation of field work to decommission the Building -1401 basement and the initiation of engineering, planning, and regulatory documentation for the decommissioning of the K-25 and K-27 enrichment buildings.	5,338
OR-443 / East Tennessee Technology Park Surveillance and Maintenance	
# The net increase for Program Baseline Summary OR-443 and OR-441 is attributable to an increased level of landlord construction, landlord infrastructure support, and surveillance and maintenance. The FY 2001 funding is required to maintain the East Tennessee Technology Park site until cleanup is largely completed.	4,047
OR-493 / Oak Ridge Operations Prime Contracts	
# The decrease in funding reflects the completion of the Oak Ridge Operations prime contracts in FY 2000 and the planned cost profile of the BNFL, Inc. fixed price decontamination and decommissioning contract.	-8,132
OR-523 / Paducah Remedial Action	
# Acceleration of Drum Mountain scrap metal removal and initiate stabilization activities at two shutdown facilities	13,648
OR-543 / Paducah Surveillance and Maintenance	
# Decrease in maintenance required at monitoring sites due to efficiencies	-2,958
OR-553 / Paducah Waste Management	
# Accelerate characterization and disposal of remaining 9,000 drums of low-level waste.	13,107
OR-623 / Portsmouth Remedial Action	
# Increase due to transitioning from assessment to initiation of construction of Quad I final corrective measures, and Quad II design/build final corrective measures	29,377

	FY 2001 vs. FY 2000 ($000)
OR-643 / Portsmouth Surveillance and Maintenance	
# Increase due to additional number of post-closure sites requiring long-term monitoring . . .	2,179
OR-653 / Portsmouth Waste Management	
# Decrease due to deferred low-level waste treatment and disposal to outyears	-1,426
OR-893 / Directed Support	
# The net decrease of $-2,035,000 for Program Baseline Summary OR-891 (Defense Post 2006 Completion) and OR-893, which both fund Directed Support, is due to the completion of many of the management and operations contractor close out activities, and a reduction of Agreement in Principle support request based on historical costs.	-2,729
Total Funding Change, Oak Ridge	53,791

Major Issues

There is a possibility that the United States Enrichment Corporation might shutdown a Gaseous Diffusion Plant in the near future which would require decontamination and decommissioning. The current lease agreement with the United States Enrichment Corporation expires in June 2004. The lease agreement only requires the United States Enrichment Corporation to give DOE two years notice before termination. Future demand for enriched uranium and sales by the United States Enrichment Corporation will drive its decision to terminate or continue the lease. A decision to terminate the lease may cause DOE to initiate decontamination and decommissioning work much earlier than expected. DOE would request additional funding if shutdown of a plant occurred prematurely. Turnover of a Gaseous Diffusion Plant to DOE would have significant impacts to the current program which has already experienced completion delays.

Multi-Site

Mission Supporting Goals and Objectives

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund supports partial payment of Uranium/Thorium licensee claims, as required under Title X, Subtitle A of the Energy Policy Act of 1992. The Act directs that the fund be used to reimburse operating uranium or thorium processing site licensees for the costs of their environmental cleanup at those sites, subject to a specific reimbursement limit. This payment is to cover the Federal Government's share of cleanup being carried out at specific active uranium and thorium processing sites. The Department compensates site owners on a per-ton basis for the restoration costs for those tailings attributable to the Federal Government.

Program Goal

To ensure the Federal Government compensates the Uranium/Thorium licensees for the Federal Government's portion of cleanup costs at their sites.

Program Objective

The Uranium and Thorium Reimbursements will be distributed in the spring of 2001 based on approved unpaid claims submitted through FY 2000. Reimbursements will be based on the review and audits of claims submitted by 13 uranium licensees and one thorium licensee.

Performance Measures

There are no Performance Measures associated with the Uranium Enrichment Decontamination and Decommissioning Fund.

Significant Accomplishments and Program Shifts

Provide for partial payment of approved Uranium/Thorium (Title X) claims (FY 1999/FY 2000/ FY 2001).

Funding Schedule

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
HQ-4000 / Reimbursements to Uranium and Thorium Licensees under Title X of the Energy Policy Act of 1992	30,000	30,000	30,000
Total, UE Decontamination and Decommissioning	30,000	30,000	30,000

Detailed Program Justification

(dollars in thousands)

	FY 1999	FY 2000	FY 2001
HQ-4000 / Reimbursements to Uranium and Thorium Licensees under Title X of the Energy Policy Act of 1992			
The project reimburses the operating uranium or thorium processing site licensees for a portion (the Federal material determined to be at each site) of their costs of cleanup.			
# Provide for partial payment of approved Uranium/Thorium licensee claims for cleanup completed.			
# Pursuant to House Conference Report 106-336, the chart below displays the current list of eligible uranium and thorium licensees, amounts paid through FY 1999, amounts approved for payment, and estimated payments FY 2000 through the end of the program.			
HQ-4000	30,000	30,000	30,000
Total Multi-Site UE Decontamination and Decommissioning	30,000	30,000	30,000

Title X of the Energy Policy Act of 1992: Uranium/Thorium Reimbursement Program

(dollars in thousands)

Licensees	Total Payments FY 1994-1999	Approved for Payment [a]	Estimated Payments FY 2000 through End of Program [b]	Additional Liability Authorized Under Title X [c]
Uranium				
American Nuclear Corp. Site				
American Nuclear Corporation	686	90	195	0
State of Wyoming	689	522	1,104	0
Atlantic Richfield Company	29,503	2,803	2,803	0
Atlas Corporation [d]	5,909	1,083	13,143	0
Cotter Corporation	1,933	1,149	454	1,484
Dawn Mining Company	2,020	733	2,838	0
Homestake Mining Company	27,710	4,169	24,543	0
Pathfinder Mines Corporation	3,950	744	4,730	0
Petromics Company	1,632	366	952	0
Quivira Mining Company	10,958	1,912	6,005	0
Tennessee Valley Authority	10,020	14,627	2,201	12,909
Umetco Minerals Corporation-CO	34,507	5,966	8,413	14,574
Umetco Minerals Corporation-WY	8,790	2,156	7,754	6,450
Western Nuclear, Incorporated	19,855	5,368	8,012	4,703
Sub-total, Uranium	158,162	41,688	83,147	40,120
Thorium				

[a] These amounts are prior year claims that have been approved but have not been paid because total appropriations have been less than total approved claims to date. Amounts for two of the companies, Cotter Corporation and TVA, include claims, a portion of which exceed the current mandated reimbursement ceilings. Amounts in excess of the mandated reimbursement ceiling are not eligible for reimbursement at this time but could become eligible for reimbursement beginning in FY 2005.

[b] These amounts include the approved but unpaid amounts in the previous column and estimates of future claims provided by the licensees in 1998.

[c] These amounts are estimates of claims that would be in excess of the uranium dry short ton ceiling at the end of the program. Under Sec. 1001.(b)(2)(E) of the Energy Policy Act of 1992, the Secretary may allow reimbursement of these claims in FY 2005 if there is an excess of uranium reimbursement authority.

[d] Effective 12/30/99, the Nuclear Regulatory Commission transferred the license from the Atlas Corporation, to a newly created trust approved by a bankruptcy court. Cleanup will be performed by the trustee.

	(dollars in thousands)			
Kerr-McGee Chemical Corp	69,494	30,234	79,842	0
Sub-total, Thorium	69,494	30,234	79,842	0
Total, Uranium and Thorium	227,656	71,922	162,989	40,120

Explanation of Funding Changes From FY 2000 to FY 2001

	FY 2001 vs. FY 2000 ($000)
HQ-4000 / Reimbursements to Uranium and Thorium Licensees under Title X of the Energy Policy Act of 1992	
# No change from FY 2000 to FY 2001	0
Total Funding Change, Multi-Site	0

Major Issues

Due to overall priorities within the Uranium Enrichment Decontamination and Decommissioning Fund (i.e. compliance activities, high priority cleanup actions, etc.), the funding requested only covers a portion of the claims.

East Tennessee Technology Park Three-Building Decontamination and Decommissioning and Recycling Project, Oak Ridge, Tennessee (OR-493) [a] [b]

(Changes from FY 2000 Congressional Budget Request are denoted with a vertical line [|] in the left margin.)

Significant Changes

- Renegotiation of contract to incorporate a Departmental decision to prohibit free release of volumetrically-contaminated nickel, and miscellaneous other contract items is underway and should be completed by March 2000.
- The increase in Total Estimated Cost/Total Project Cost from $284,298,000 to $295,198,000 reflects an increase in project cost by $3,734,000 due to approved baseline changes and an increase in contingency from 3.1 percent to 5.4 percent (+$7,166,000). The increase in contingency is to cover anticipated direct project cost increases due to decreased funding, extending contract and claims for DOE's decision on nickel recycling alternative, and more potential baseline changes resulting from miscellaneous scope increases.

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[a] This Project Baseline Summary includes funding for other activities which are not reflected in this datasheet.

[b] Project Baseline Summary OR-493 contains additional funding for the period FY 2004 through FY 2008 for decontamination and decommissioning of the K-25 and K-27 buildings. This project datasheet covers the ongoing decontamination and decommissioning of three of the process buildings (K-29, K-31, and K-33).

1. Construction Schedule History

	Fiscal Quarter				Total Estimated Cost ($000)	Total Project Cost ($000)
	A-E Work Initiated	A-E Work Completed	Mobilization Start	Physical Construction Complete		
FY 1999 Budget Request	N/A	N/A	4Q 1997	1Q 2004	272,126	283,866
FY 2000 Budget Request *(Current Baseline Estimate)*	N/A	N/A	4Q 1997	1Q 2004	284,298	284,298
FY 2001 Budget Request	N/A	N/A	4Q 1997	4Q 2004	295,198 [a]	295,198

2. Financial Schedule (Operating Expense Funded)

(dollars in thousands)

Fiscal Year	Appropriations	Obligations	Cost
1997	8,399	8,399	6,937
1998	19,599 [b]	19,599	16,789 [c]
1999	44,000 [d]	44,000	46,457
2000	62,500	62,500	61,544
2001	60,200	60,200	62,130
2002	47,000	47,000	46,582
2003	47,000	47,000	47,794
2004	6,500	6,500	6,965

[a] Represents the escalated amount of the BNFL Inc. contract ($263,351,887) plus an ~6.0 percent contingency for potential fluctuations in the metals market and miscellaneous baseline change orders for a total BNFL Inc. contract amount of $295,198,000. This amount is net of the value of salvage material recovered by BNFL, Inc. during decontamination and decommissioning activities, estimated at $61,920,415 ($55,569,748 before escalation). In addition, this estimate includes project support costs of $12,172,000 for fencing, office moves and set-up, contractor interface, independent verification team support, and miscellaneous documents.

[b] The FY 1998 Congressional Budget Request, Volume 5, dated February 1997, pg. 880, cited the subject project, beginning in FY 1997, and was included in the $54,189,000 for the East Tennessee Technology Park (K-25) Decommissioning in FY 1998; includes $1,125,000 of program management support and all funding associated with PBS OR-493 (UE D&D Fund).

[c] Includes approved Baseline Change Proposals and Option-I, Switchyard Demolition.

[d] Termination liability of $3.5 million was transferred to more critical environmental management compliance projects for FY 1999. Funding will be restored within FY 2003 appropriations.

3. Project Description, Justification and Scope

The East Tennessee Technology Park gaseous diffusion process buildings were permanently closed in 1987, and the uranium enrichment mission transferred to the United States Enrichment Corporation at Portsmouth, Ohio, and Paducah, Kentucky. The three buildings of the project are filled with diffusion equipment which is contaminated with uranium and which contains barrier material representing a classified technology requiring provisions for security and protection. The three buildings are currently unusable and require continuous surveillance and maintenance activities estimated to cost approximately $80,700,000 for the ten-year period FY 1997 through FY 2006 (estimate taken from *Engineering Evaluation/Cost Analysis*, DOE/OR/02-1579&D1, April 1997).

The challenge for this project is to link the ability to remove equipment/material and to clean up the buildings with some economically viable salvage/recycle of the equipment/material in an effort to lower the overall cost to the government. The cost recovery portion of the project (the equipment and material) requires unique contractor capabilities due to the contamination present, the classified nature of much of the recyclable material, and the limited market for previously-contaminated material.

The East Tennessee Technology Park Three Building Decontamination and Decommissioning and Recycling Project encompasses buildings' K-29, K-31, and K-33. The three buildings contain approximately 45 percent of the five East Tennessee Technology Park Gaseous Diffusion Plant building materials.

The following table summarizes the quantity of contaminated or potentially contaminated metal planned to be removed from the facilities, decontaminated and processed as appropriate, and economically recycled.

East Tennessee Technology Park Three Building Decontamination and Decommissioning and Recycling Initiative Quantity Data

	(building)		
	K-29	K-31	K-33
Building Size (Gross Sq. Ft.) . . .	451,000	1,660,000	2,780,000
Metal Quantities for Processing			
Fe Metals (Tons)	10,624	31,678	62,489
Nickel (Tons)	692	1,563	3,752
Copper (Tons)	1,165	2,810	7,036
Aluminum (Tons)	899	2,301	4,140

The scope of the East Tennessee Technology Park Three-Building Decontamination and Decommissioning and Recycle Project includes the following:

- perform decontamination and decommissioning and recycle under fixed-price contract;
- perform surveillance and maintenance services;
- remove all process equipment and materials from the three buildings;
- decontaminate vacant areas within the buildings to industrial reuse standards;
- decontaminate and recycle the majority of materials and equipment;
- disposal of all waste; and
- provide the buildings ready for industrial occupancy as they are completed.

The three building concept is the beginning of full decontamination and decommissioning of the five East Tennessee Technology Park gaseous diffusion plant buildings. The concept directly supports reindustrialization of East Tennessee Technology Park, which is targeted as a key mission by DOE resulting in accelerated cleanup, cost savings, and indirect benefits to the Oak Ridge work force and community. DOE has signed an agreement with the Community Reuse Organization of East Tennessee to encourage utilization of the East Tennessee Technology Park site. This agreement allows the Community Reuse Organization of East Tennessee to lease East Tennessee Technology Park facilities from DOE and in turn sublease them to outside companies to use them for a variety of activities. The three buildings of the proposed concept will be leased to the Community Reuse Organization of East Tennessee, one by one, as soon as building decontamination is completed.

The intent of this project is to find the best economical match between the Government's desire to have the three buildings cleaned up and available for alternative use, and to minimize the overall cost of accomplishing the task. BNFL Inc., in fulfilling this charge, brings their expertise in cleaning up similar diffusion facilities at Capenhurst, Great Britain industrial contacts, to take over the surveillance and maintenance of the buildings, execute cleanup, and tailor the entire process to minimize the quantity of material shipped for disposal. The decontamination and recycle enterprises will be negotiated and established by BNFL Inc. Recyclable materials will be recovered and delivered to these enterprises in forms that meet the acceptance and fulfill the specialized and focused needs of BNFL Inc.'s business associates.

In this concept, BNFL Inc. and its subcontractors have expertise in each of the decontamination and decommissioning, recycle, and waste disposal areas needed to perform the scope of work described above. BNFL Inc. was selected through a competitive process, whereby, an announcement was published in the Commerce Business Daily requesting expressions of interest from all parties desiring to perform the decontamination and decommissioning of the three process buildings. Several responses were received, but only BNFL Inc.'s met all the terms set forth in the published announcement. Therefore, BNFL Inc. was awarded a fixed price contract for delivering vacant and decontaminated buildings to DOE/Oak Ridge Operations. The work will be performed utilizing external licensing by the Tennessee Department of Environment and Conservation (which has Nuclear Regulatory Commission oversight responsibilities in

Tennessee) and under the Office of Safety and Health Administration rules (off-site) and DOE oversight (on-site) utilizing Work Smart Standards.

In this approach, savings occur (estimated at approximately $500 million over the traditional Management and Operating approach) due to a combination of efforts including (1) reduced engineering and management overhead and fees, (2) reduced surveillance and maintenance cost, (3) efficiencies in the approach to recycle and building decontamination based on BNFL Inc.'s successful experiences at Capenhurst, (4) reduced contingency due also to BNFL Inc.'s experience and confidence based on Capenhurst decontamination and decommissioning, and (5) DOE's assignment of all materials in the three buildings to BNFL Inc. [a] In return for these benefits, BNFL Inc. takes responsibility for recycle/salvage activities through whatever means BNFL Inc. selects, including waste containers or other products fabricated from recycled metal. BNFL Inc. is following an approach that disposes of more low-valued metal than in the previous approach; and BNFL Inc. is using the least-net-cost method for decontamination and recycle of other assets.

Additional benefits to the Department from the East Tennessee Technology Park Three Building Decontamination and Decommissioning and Recycle Project includes:

- Reduced risk to the public, workers, and the environment by accomplishing decontamination and decommissioning of the buildings sooner than planned. Risk is related to the deposited uranium products left in the gaseous diffusion plant systems at shutdown, coupled with the fact that neither the systems nor buildings are designed for long-term storage of nuclear materials.
- Risk is assumed by the contractor during cleanup, including risks of waste handling and disposal.
- Removal of process systems eliminates fissile material hold-ups as well as risk of potential criticality accidents. This is consistent with requirements within the Defense Nuclear Facilities Safety Board 94-1 Implementation Plan.
- The approach leaves buildings standing that will be used by DOE and the Community Reuse Organization of East Tennessee in efforts to reindustrialize East Tennessee Technology Park.
- The approach results in the further establishment and verification of efficient decontamination and decommissioning methods that will be made available to DOE for use at other facilities.
- Further, incidental benefits include the establishment of equipment/metal decontamination and recycle capabilities in Oak Ridge which will maintain jobs in the region. BNFL Inc.'s approach allows for management and operating worker transition to the private sector and will create approximately 600 replacement jobs.

[a] As of January 12, 2000, the Department will retain ownership of the nickel under this contract.

4. Details of Cost Estimate

(dollars in thousands)

	Current Estimate	Previous Estimate
Design Phase		
None	0	0
Total, Engineering, Design, Inspection, and Administration of Construction Costs	0	0
Construction Phase		
Removal cost less salvage (BNFL contract)	267,086 [c]	263,352
Project Support Costs (4.1% of TEC)	12,172	12,172
Total, Construction Costs	279,258	263,352
Contingencies		
Construction Phase (5.4% of the TEC)	15,940	8,774
Total, Costs (TEC & TPC)	295,198 [d]	284,298

The National Academy of Sciences recommendation (*Affordable Cleanup?*, February 1996) included a least cost scenario to accomplish the East Tennessee Technology Park gaseous diffusion plant decontamination and decommissioning program. While the National Academy of Sciences did not intend for the *Affordable Cleanup?* document to represent a detailed cost estimate, a scaling exercise is included that bounds the five-building cleanup in the range from $510,770,000 to $935,960,000. This bound can be pro-rated to a three-building bound with the range from $204,308,000 to $374,484,000 with a mid-point of $289,396,000. These estimates are unescalated dollars, the mid-point amount escalated is $321,438,000.

5. Method of Performance

BNFL Inc. will finance the project; design the decontamination facilities; apply for and receive required permits and licenses; construct necessary facilities and bring them on-line; operate the facilities to decontaminate metals and equipment; salvage metal and equipment; and deactivate the decontamination facilities. BNFL Inc. will recover the resources it has invested both through recycle activities and through the delivery of vacated and decontaminated building space paid for by DOE on a fixed-unit-price basis. The underlying intent is to transfer the primary share of the financial, performance, and operational responsibility from the government to BNFL Inc.

[c] This direct project cost increase is result of approved baseline changes for repairing cranes, electrical system, and miscellaneous small scope changes totaling $3,734,000.

[d] This estimate for the contracting approach is expected to provide a cost savings/avoidance of approximately $500 million compared to the traditional Management and Operating approach.

DOE will request sufficient annual appropriations to cover the anticipated scope of work to be performed by BNFL Inc. and the necessary support costs such as independent verification support, with an appropriate rate of return in the event the contractor defaults or DOE chooses to cancel for government convenience. Provisions will be included in the contract to ensure that current year work scope is limited to the available funding within the contract. Additional liabilities for a government termination for convenience would amount to approximately $3,500,000 for demobilization and cleanup of the decontamination and decommissioning workshop and relocation and severance pay for affected employees. Should termination occur, the additional funding would be identified within the then current funding at the Oak Ridge Operations Office.

The total cost of the decontamination and decommissioning, recycling and waste disposal is larger than the value of the material and products that can be removed from the three buildings by approximately $280,000,000 to $290,000,000 which reflects the government's contractual liability. The contractor will incur substantial up-front expenses such as design and construction of a disassembly and size reduction workshop to be located on-site, and design and construction of a nickel electro-refining facility (located either on-site or off-site). Payments to the contractor are to be consistent with services provided, e.g., areas of the buildings cleaned of equipment and material. The payments will be made from annual appropriations based on: (1) the original obligation for the contractor's start-up costs, (2) amortization of the contractor's capital costs, (3) removal and decontamination of equipment/material, (4) recycling of materials, (5) decontamination of the buildings, and (6) disposal of wastes.

6. Schedule of Project Funding

(dollars in thousands)

	Prior Years	FY 1999	FY 2000	FY 2001	Outyears	Total
Project Cost						
Facility Cost						
Design	0	0	0	0	0	0
Construction	23,726	46,457	61,544	62,130	101,341	295,198
Total Facility Cost	23,726	46,457	61,544	62,130	101,341	295,198
Other Project Cost						
Conceptual design costs	0	0	0	0	0	0
NEPA documentation costs	0	0	0	0	0	0
Other project-related costs	0	0	0	0	0	0
Total other project costs	0	0	0	0	0	0
Total, Project Costs	23,726	46,457	61,544	62,130	101,341	295,198
LESS: Non-Federal contribution	0	0	0	0	0	0
Total Project Cost (TPC)	23,726	46,457	61,544	62,130	101,341	295,198

7. Related Annual Funding Requirements

(dollars in thousands)

	Current Estimate	Previous Estimate
Annual Facility operating costs	N/A	N/A
Annual Facility maintenance and repair costs	N/A	N/A
Total related annual funding [a]	N/A	N/A

8. Background Issue

This contract is a negotiated fixed-price contract with BNFL Inc. to cleanup three of the five gaseous diffusion buildings at East Tennessee Technology Park. BNFL Inc. will provide sufficient financing until elements of performance are completed, i.e., portions of the buildings are cleaned up. Payments will be made to BNFL Inc. upon completion of equipment removal from individual portions of the buildings and other payments after each building is decontaminated. The offset from the recycling initiative, based on fair market value, is adjustable if prices as indexed on the American Metals Market fluctuate more than five percent from the prices negotiated as part of the contract. Changes above or below five percent shall be split between DOE and the contractor. This will occur seventeen times in the course of the contract.

9. Contracting Authority

The authority for DOE to enter into this contract is found at 42 U.S.C. § 7256(c). Authority for the Department of Energy (DOE) to offset against the contract price paid to BNFL Inc. the cost of proceeds that BNFL Inc. receives from the sale of property it acquires as partial consideration for the contract work is found in Subpart 37.3, "Dismantling, Demolition, or Removal of Improvements" of the Federal Acquisition Regulation and in 40 U.S.C. § 485(e) of the Federal Property and Administrative Services Act of 1949, as amended.

Authority for the Federal Acquisition Regulation Subpart 37.3 is found in 40 U.S.C. § 486(c). See 48 Federal Register 42365 (Sept. 19, 1983). The Federal Acquisition Regulation Subpart 37.3 provides that when the Government pays a contractor to dismantle or demolish structures, in further consideration of contract performance, title to property to be dismantled or demolished maybe transferred to the contractor and the value of this property will be considered when determining payment to the contractor. See Federal Acquisition Regulation 37.303; Federal Acquisition Regulation 37.304(a); Federal Acquisition Regulation 52.237-4. Federal Acquisition Regulation Subpart 37.3 is applicable to this contract because the contract requires BNFL Inc. to dismantle, demolish and remove the interiors of the three process buildings at East Tennessee Technology Park. In consideration for this work, BNFL Inc. will receive a fixed price and title to the property in the three process buildings. BNFL Inc. intends to recycle and sell a certain amount of this property. The fixed price paid by DOE will reflect credit of a dollar amount that the parties agree reflects the expected value

[a] Because this is not a construction project, there are no related annual maintenance and repair costs.

of the recycled property; i.e., the proceeds received by BNFL Inc. from the sale of the property it has received as partial consideration for its work under the contract.

40 U.S.C. § 485(a) provides that proceeds from any "disposition of surplus property" shall be sent to the Treasury as miscellaneous receipts unless one of the exceptions set forth in 40 U.S.C.§ § 485(b), (c), (d) or (e) is applicable. Section 485(e) is applicable to the use of proceeds from the disposition of property by BNFL Inc. under the contract. This section provides that "any contract" entered into by an executive agency such as DOE may authorize that "any sale of property in the custody of the contractor . . . be credited to the cost or price of the work covered by such contract . . ." DOE therefore may credit the proceeds from the sale of property provided to BNFL Inc. under this Decontamination and Decommissioning contract as partial consideration for the contract work against the total fixed price paid by DOE to BNFL Inc.

DOE and BNFL Inc. anticipate that the property to be provided to BNFL Inc. as partial consideration for BNFL Inc.'s work will contain metals that can be recycled and subsequently sold. However, since DOE and BNFL Inc. expect that most of these metals are contaminated with radionuclides and other substances (e.g., PCB's) and many are in a classified configuration, the metals must be decontaminated and declassified before they can be recycled. Most of the fixed contract price will reflect the considerable decontamination and associated work that must be performed by BNFL Inc. This work therefore is deemed to be outside the intent of the language under the section entitled "Use of Receipts From Leasing or Selling Government Property or Assets" in Title III of both the Energy and Water Development Appropriations Bill, 1997 (H. R. Rep. 104-679) and the Conference Report entitled "Making Appropriations for Energy and Water Development for The Fiscal Year Ending September 30, 1997, And for Other Purposes" (H. R. Rep.104-782).

The DOE/Oak Ridge Operations Contracting Officer for the East Tennessee Technology Park Three-Building Decontamination and Decommissioning and Recycling Project has evaluated and deemed it to be in the Best Interest of the Government to utilize the property generated by the dismantling and demolition activities as part of the compensation to be provided the contractor for Decontamination and Decommissioning services. The reasons for utilizing this concept and subsequent determination are as follows:

- DOE has legal authority to enter into this contract.
- The intent of this project is to find the best economical match between the government's desire to clean the three buildings up and to minimize the overall cost of the task.
- The cost recovery aspects of the equipment and material in the project are not readily available due to the contamination present, the classified nature of much of the material, and the limited market for previously contaminated material.
- The material has no value in the current state of contamination and the government has no use for the material.
- The expertise of BNFL Inc. in cleaning up similar diffusion facilities in Great Britain, their financial backing, and their industrial contacts.

BNFL Inc. will negotiate and establish decontamination and recycle enterprises. Recyclable materials will be recovered and delivered to these enterprises in forms that meet the acceptance and fulfill the specialized and focused needs of BNFL Inc.'s business associates.

DOE/Oak Ridge Operations does not have the expertise in house to recycle and market this material at a comparable cost. Substantial investment would be required, either in-house or through a separate contract to accomplish the same task.

10. Project Status (as of December 31, 1999)

BNFL assumed responsibility for Buildings K-31 and K-33 on January 5, 1998 and Building K-29 on July 1, 1998.

BNFL started process equipment dismantlement and removal on July 1, 1998.

BNFL awarded Option-I, Dismantlement and Removal of K-31 and K-33 Switchyards, for net DOE cost of $196,432.

Overall cleanup of K-33 is in excess of 27 percent complete versus 45 percent scheduled.

Completed 85 percent of Switchyard demolition.

Shipped 946 tons of PCB contaminated transformers to a licensed treatment/disposal facility.

Shipped 890 tons of low-level waste to Envirocare.

Shipped 2,458 tons of K-33 metal for unrestricted release off site.

Shipped 4,505 tons of Switchyard metals for unrestricted reuse off site.

Oak Ridge has negotiated and approved eleven baseline change proposals totaling $3,734,000.

Milestone 1 completed on schedule.

Milestone 2 four months behind schedule.

Milestone 3 completed September 27, 1999, 6 months behind schedule.

Milestone 4 completed on schedule, June 2, 1999.

Milestone 5, complete unit-7 removal in K-33, (dismantlement only) completed September 30,1999, versus scheduled completion of dismantlement and removal of August 1, 1999. DOE withholding payment pending completion of large component removal.